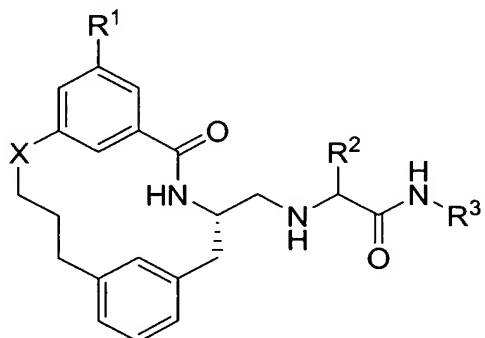


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1. (Original) A compound of the formula I:



I

wherein:

R¹ is selected from the group consisting of:

- (1) hydrogen,
- (2) R⁴-S(O)_pN(R⁵)-,

wherein R⁴ is independently selected from the group consisting of:

- (a) -C₁₋₈alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (b) -NR⁵R⁶,
- (c) phenyl, and
- (d) benzyl,

wherein R⁵ and R⁶ are independently selected from the group consisting of:

- (a) hydrogen,
- (b) -C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (c) phenyl, and
- (d) benzyl,

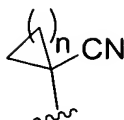
and wherein p is independently 0, 1, or 2,

- (3) -CN,
- (4) -C₁₋₆alkyl-CN,
- (5) halogen,

- (6) phenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:

- (a) -CN,
- (b) halo,
- (c) -C₁₋₆alkyl,
- (d) -O-R⁵,
- (e) -CO₂R⁵, and
- (f) -C(O)R⁵,

(7)



wherein n is 1, 2, 3 or 4;

R² is selected from the group consisting of:

- (1) hydrogen,
- (2) -C₁₋₆alkyl, -C₂₋₆alkenyl, -C₂₋₆alkynyl, or -C₃₋₈cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
 - (a) halo,
 - (b) hydroxy,
 - (c) -O-C₁₋₆alkyl,
 - (d) -C₃₋₆cycloalkyl,
 - (e) -S(O)_p-C₁₋₆alkyl,
 - (f) -CN,
 - (g) -CO₂H,
 - (h) -CO₂-C₁₋₆alkyl,
 - (i) -CO-NR⁵R⁶,
 - (j) phenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
 - (i) -C₁₋₆alkyl,
 - (ii) -CN,
 - (iii) halo,
 - (iv) -CF₃,
 - (v) -O-R⁵, and
 - (vi) -CO₂R⁵,

- (3) phenyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
- (a) -C₁₋₆alkyl,
 - (b) -CN,
 - (c) halo,
 - (d) -CF₃,
 - (e) -O-R⁵, and
 - (f) -CO₂R⁵;

R³ is selected from the group consisting of:

- (1) hydrogen,
- (2) -C₁₋₆alkyl, -C₂₋₆alkenyl, -C₂₋₆alkynyl, or -C₃₋₈cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
 - (a) halo,
 - (b) hydroxy,
 - (c) -O-C₁₋₆alkyl,
 - (d) -C₃₋₆cycloalkyl,
 - (e) phenyl or pyridyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
 - (i) -C₁₋₆alkyl,
 - (ii) -CN,
 - (iii) halo,
 - (iv) -CF₃,
 - (v) -O-R⁵, and
 - (vi) -CO₂R⁵,
 - (f) -S(O)_pN(R⁵)-C₁₋₆alkyl, and
 - (g) -S(O)_pN(R⁵)- phenyl,
- (3) phenyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
 - (a) -C₁₋₆alkyl,
 - (b) -CN,
 - (c) halo,
 - (d) -CF₃,
 - (e) -O-R⁵, and
 - (f) -CO₂R⁵;

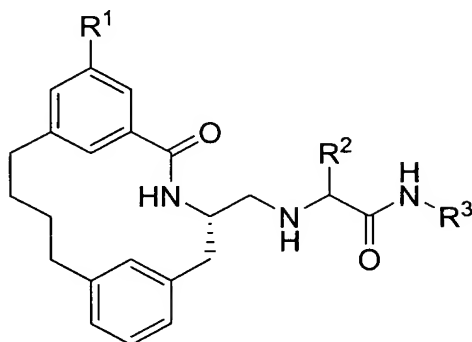
X is selected from the group consisting of:

(1) -CH₂-, and

(2) -O-;

and pharmaceutically acceptable salts thereof.

Claim 2 (Original) The compound of Claim 1 of the formula II:



II .

Claim 3 (Original) The compound of Claim 2 wherein:

R¹ is selected from:

(1) CH₃-S(O)₂N(CH₃)-;

(2) CH₃CH₂-S(O)₂N(CH₃)-;

(3) (CH₃)₂CH-S(O)₂N(CH₃)-;

(4) phenyl-S(O)₂N(CH₃)-; and

(5) (CH₃)₂N-S(O)₂N(CH₃)-;

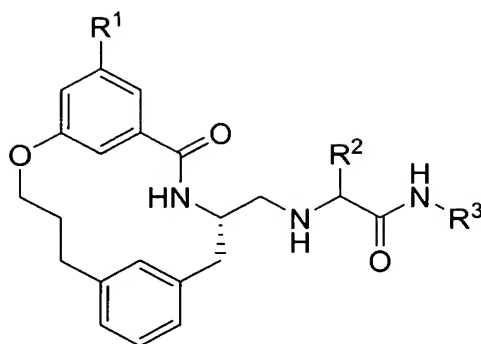
R² is -C₁₋₆alkyl, unsubstituted or substituted with cyclopropyl or halo;

R³ is -C₁₋₆alkyl or -C₃₋₈cycloalkyl; and

X is -CH₂- or -O-;

and pharmaceutically acceptable salts thereof.

Claim 4 (Original) The compound of Claim 1 of the formula III:



III.

Claim 5 (Original) The compound of Claim 1 wherein:

R¹ is selected from:

- (1) CH₃-S(O)₂N(CH₃)-;
- (2) CH₃CH₂-S(O)₂N(CH₃)-;
- (3) (CH₃)₂CH-S(O)₂N(CH₃)-;
- (4) phenyl-S(O)₂N(CH₃)-; and
- (5) (CH₃)₂N-S(O)₂N(CH₃)-;

R² is -C₁₋₆alkyl, unsubstituted or substituted with cyclopropyl or halo;

R³ is -C₁₋₆alkyl or -C₃₋₈cycloalkyl; and

X is -CH₂- or -O-;

and pharmaceutically acceptable salts thereof.

Claim 6 (Original) The compound of Claim 1 wherein:

R¹ is R⁴-S(O)₂N(R⁵)-,

wherein R⁴ is independently selected from the group consisting of:

- (a) -C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (b) phenyl, and
- (c) benzyl,

and wherein R⁵ is independently selected from the group consisting of:

- (a) hydrogen,
- (b) -C₁₋₆alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (c) phenyl, and
- (d) benzyl.

Claim 7 (Original) The compound of Claim 6 wherein R¹ is selected from:

- (1) $\text{CH}_3\text{-S(O)}_2\text{N(CH}_3\text{)-}$;
- (2) $\text{CH}_3\text{CH}_2\text{-S(O)}_2\text{N(CH}_3\text{)-}$;
- (3) $(\text{CH}_3)_2\text{CH-S(O)}_2\text{N(CH}_3\text{)-}$; and
- (4) $\text{phenyl-S(O)}_2\text{N(CH}_3\text{)-}$;
- (5) $(\text{CH}_3)_2\text{N-S(O)}_2\text{N(CH}_3\text{)-}$.

Claim 8 (Original) The compound of Claim 7 wherein R^1 is $\text{CH}_3\text{-S(O)}_2\text{N(CH}_3\text{)-}$.

Claim 9 (Original) The compound of Claim 1 wherein R^2 is -C_{1-6} alkyl, unsubstituted or substituted with cyclopropyl or halo.

Claim 10 (Original) The compound of Claim 9 wherein R^2 is selected from:

- (1) $\text{CH}_3\text{-}$;
- (2) $\text{CH}_3\text{CH}_2\text{-}$;
- (3) $(\text{CH}_3)_2\text{CH-}$;
- (4) $\text{CH}_3\text{CH}_2\text{CH}_2\text{-}$;
- (5) $(\text{CH}_3)_2\text{CHCH}_2\text{-}$;
- (6) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{-}$;
- (7) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{-}$;
- (8) $\text{cyclopropyl-CH}_2\text{-}$;
- (9) $\text{CF}_3\text{CH}_2\text{-}$; and
- (10) $\text{CH}_2\text{FCH}_2\text{-}$.

Claim 11 (Original) The compound of Claim 1 wherein R^3 is -C_{1-6} alkyl or $\text{-C}_3\text{-}$ gycycloalkyl.

Claim 12 (Original) The compound of Claim 11 wherein R^3 is selected from:

- (1) $\text{CH}_3\text{-}$;
- (2) $\text{CH}_3\text{CH}_2\text{-}$;
- (3) $(\text{CH}_3)_2\text{CH-}$;
- (4) $\text{CH}_3\text{CH}_2\text{CH}_2\text{-}$;
- (5) $(\text{CH}_3)_2\text{CHCH}_2\text{-}$;
- (6) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{-}$;
- (7) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{-}$; and
- (8) $\text{bicyclo[2.2.1]heptyl-}$.

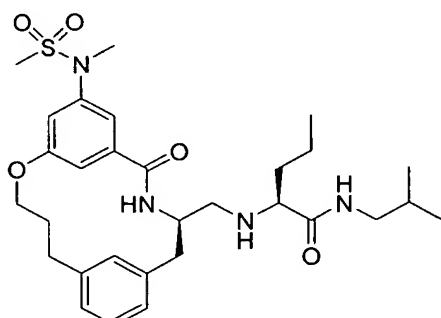
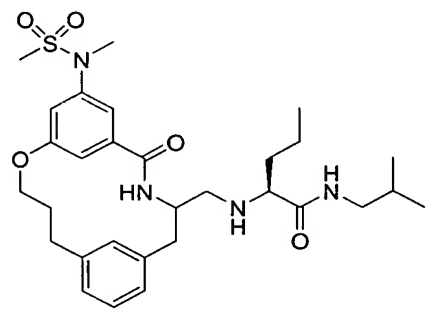
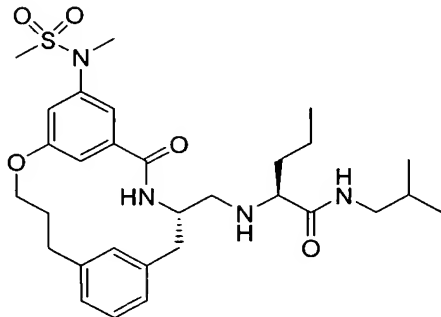
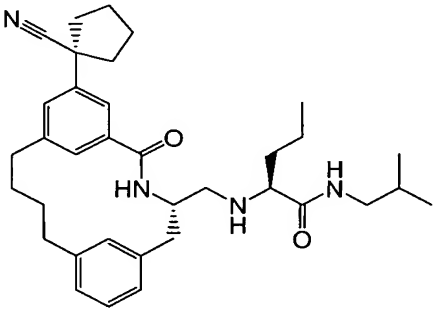
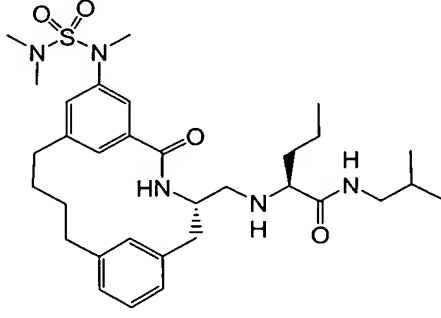
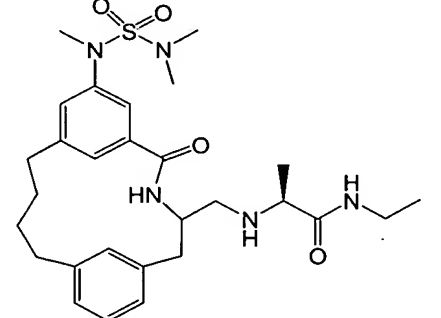
Claim 13 (Original) The compound of Claim 12 wherein R³ is (CH₃)₂CHCH₂-.

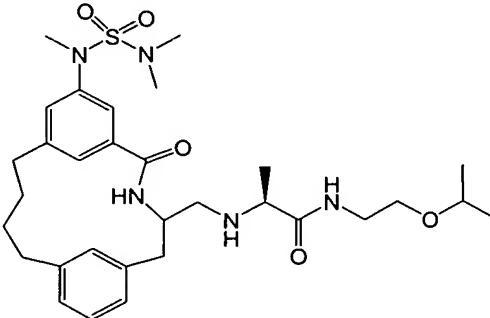
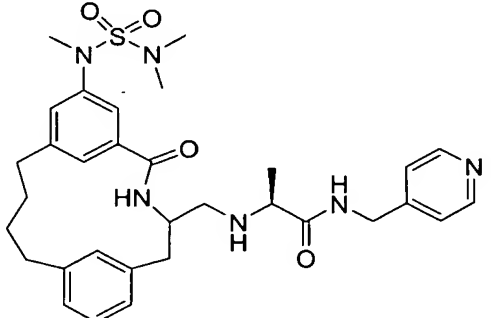
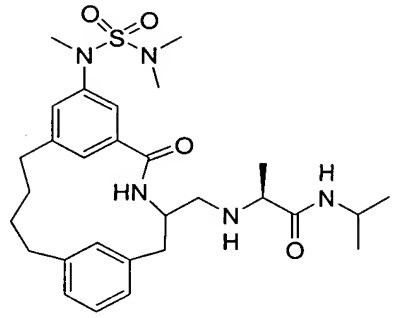
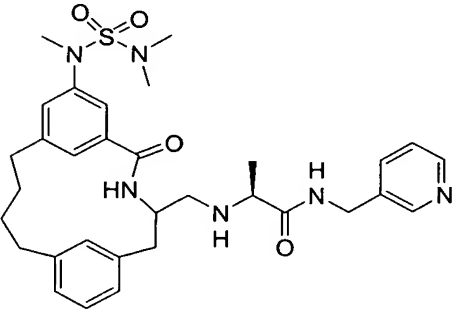
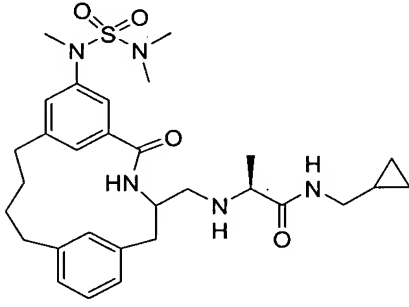
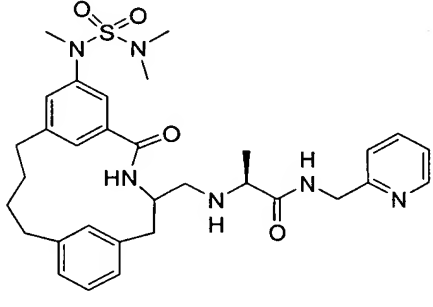
Claim 14 (Currently amended) A compound of Claim 1 which is selected from the group consisting of:

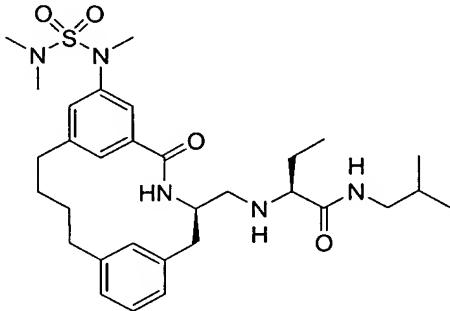
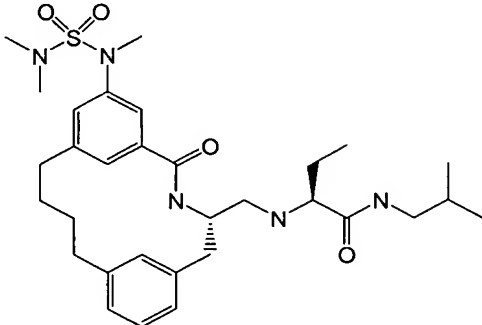
Ex	Structure	Ex	Structure
2		3	
4		5	
6		7	

Ex	Structure	Ex	Structure
8		9	
10		11	
12		13	
14		15	

Ex	Structure	Ex	Structure
16		17	
18		19	
20		21	
22		23	

Ex	Structure	Ex	Structure
24		25	
26		27	
28		29	

Ex	Structure	Ex	Structure
30		31	
32		33	
34		35	

Ex	Structure	Ex	Structure
36		37	

and pharmaceutically acceptable salts thereof.

Claim 15 (Original) A pharmaceutical composition comprising an effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.

Claim 16 (Original) A method for inhibition of β -secretase activity in a mammal in need thereof which comprises administering to the mammal a therapeutically effective amount of a compound of Claim 1.

Claim 17 (Original) A method for treating Alzheimer's disease in a patient in need thereof comprising administering to the patient an effective amount of a compound of Claim 1.